

AMENDMENTS TO THE CLAIMS

1-43. (Cancelled)

44. (Currently amended) A method for detection of a pathogen by detecting a plurality of analytes in a sample, the plurality of analytes derived from infection by the ~~one~~ pathogen, and the method comprising the steps of:
- (a) providing a solid phase comprising a non-porous support, the non-porous support comprising at least two spatially separate test areas and an inert solid phase, wherein a first test area has a first analyte-specific receptor bound thereto, and a second test area has a second analyte-specific receptor bound thereto, each spatially separate test area having no more than one type of analyte-specific receptor bound thereto, and each analyte-specific receptor is specific to an analyte of the plurality of analytes in the sample, and wherein the first receptor and the second receptor bind to different analytes of the plurality of analytes in the sample;
 - (b) contacting the sample with the solid phase and with a detection reagent comprising one or more third receptors to allow binding of the plurality of analytes to the first and second test areas and allow binding of the one or more third receptors to the plurality of analytes bound to the first and second test areas, wherein each third receptor is specific for one or more analytes of the plurality of analytes bound to the first and second test areas, and wherein each third receptor is directly or indirectly labeled with a signal generating group;
 - (c) detecting and separately measuring presence or amount of a signal generated by the signal generating group bound to the first and second test areas; and
 - (d) calculating a test area-specific cut-off index (COI) on each test area based on a test area-specific background detected from a signal generated by any signal generating group non-specifically bound to the inert solid phase, wherein a COI larger than 1 for either one of the first and second ~~one~~ test areas is indicative ~~for~~ of presence of ~~a specific analyte~~ an analyte of the plurality of analytes that binds to the first or second test area, which is indicative of the presence of the pathogen in the sample.

45. (Currently amended) The method of claim 44 wherein the plurality of analytes is selected from the group consisting of human immunodeficiency virus I (HIV I)-antibodies, human immunodeficiency virus II (HIV II) -antibodies, and (HBV), and (HCV) -antibodies and HIV antigens.
46. (Previously presented) The method of claim 44 wherein each test area has a diameter of 0.01 to 1 mm.
47. (Previously presented) The method of claim 44 wherein the solid phase further comprises a control area for detecting false results caused by interferences
48. (Currently amended) The method of claim 44 wherein the ~~detection reagent comprises at least one third receptor that is specific for the analyte and a signal[[-]]~~ generating group ~~which~~ is either directly bound to the third receptor or ~~which~~ is a universal detection reagent comprising labelled latex particles which binds to the third receptor.
- 49-72. (Canceled)
73. (Previously presented) The method of claim 44, wherein the plurality of analytes comprises at least two different antigens or at least two different antibodies or at least one antigen and one antibody.
74. (Canceled)
75. (Previously presented) The method of claim 73, wherein the plurality of analytes comprises HIV p24 antigen, antibodies to HIV gp41 polypeptide, or antibodies to HIV reverse transcriptase (RT).
76. (Previously presented) The method of claim 44, wherein the signal generating group comprises a fluorescent group, a chemiluminescent group, an enzyme, a radioactive group or a sol particle group.

77. (Previously presented) The method of claim 44, wherein the pathogen is selected from the group consisting of HIV I, HIV II, HBV, and HCV.
78. (Previously presented) The method of claim 44, wherein the COI is calculated by the formula: $\text{COI} = \frac{\text{signal}_{\text{sample}} - \text{background}_{\text{sample}}}{n} \times \text{background}_{\text{negative control}}$, the n ranging between 2 and 100.
79. (Previously presented) The method of claim 78, wherein n ranges between 2 and 10.
80. (Previously presented) The method of claim 79, wherein n is 2.
81. (New) The method of claim 44 wherein the plurality of analytes is human hepatitis B virus (HBV) antibodies or antigens.
82. (New) The method of claim 44 wherein the plurality of analytes is human hepatitis C virus (HCV) antibodies or antigens.